

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) An isolated gene encoding:

(a) a protein having the amino acid sequence listed as SEQ ID NO:2 of the Sequence Listing; or

(b) a protein having at least 90% **95%** identity with the amino acid sequence listed as SEQ ID NO:2 of the Sequence Listing through the conservative substitution of one or more amino acids and also binding to an antibody or an antibody fragment that is **produced by the hybridoma cell line deposited as FERM BP-6103** ~~active to induce granulocyte colony-stimulating factor.~~

2. (Currently Amended) An isolated gene having:

(a) the nucleotide sequence listed as SEQ ID NO:1 of the Sequence Listing;

(b) a nucleotide sequence which encodes a protein having at least 90% **95%** identity with the amino acid sequence listed as SEQ ID NO:2 of the Sequence Listing through the conservative substitution of one or more amino acids and that can bind to an antibody or an antibody fragment this is **produced by the hybridoma cell line deposited as FERM BP-6103** ~~active to induce granulocyte colony-stimulating factor; or~~

(c) a nucleotide sequence which hybridizes with DNA having the nucleotide sequence listed as SEQ ID NO:1 of the Sequence Listing under stringent conditions of 6X SSC, 5X Denhardt's solution, 0.5% SDS, 25-68°C or 0-50% formamide, 6X SSC, 0.5% SDS, 25-68°C and which encodes a protein that can bind to an antibody or an antibody fragment that is **produced by the hybridoma cell line deposited as FERM BP-6103** ~~active to induce granulocyte colony-stimulating factor.~~

3. - 5. (Cancelled)

6. (Previously Presented) A gene according to claim 1, which is a mouse gene.

7. - 8. (Cancelled)

9. (Currently Amended) Any of the following purified proteins:

(a) a protein having the amino acid sequence listed as SEQ ID NO:2 of the Sequence Listing;

(b) a protein having at least ~~90%~~ **95%** identity with the amino acid sequence listed as SEQ ID NO:2 of the Sequence Listing through the conservative substitution of one or more amino acids and also binding to an antibody or an antibody fragment that is **produced by the hybridoma cell line deposited as FERM BP-6103** ~~active to induce granulocyte colony-stimulating factor~~; or

(c) a protein that is encoded by the DNA which hybridizes with DNA having the nucleotide sequence listed as SEQ ID NO:1 of the Sequence Listing under stringent conditions of 6X SSC, 5X Denhardt's solution, 0.5% SDS, 25-68°C or 0-50% formamide, 6X SSC, 0.5% SDS, 25-68°C and that binds to an antibody or an antibody fragment that is **produced by the hybridoma cell line deposited as FERM BP-6103** ~~active to induce granulocyte colony-stimulating factor~~.

10. -11. (Cancelled)

12. (Previously Presented) A purified protein according to claim 9, which is a mouse protein.

13. - 17. (Cancelled)

18. (Previously Presented) A recombinant vector containing a gene according to claim 1.

19. (Previously Presented) A transformed cell comprising a recombinant vector that contains the according to claim 1.

20. (Previously Presented) An isolated receptor for a substance that can induce production of granulocyte colony-stimulating factor, wherein the receptor comprises a protein according to claim 9 and is present in a cell which can produce granulocyte colony-stimulating factor.

21. (Previously Presented) A screening method for a substance, which can bind to the protein according to claim 9 or the receptor according to claim 20, which comprises:

- (i) providing a potential substance;
- (ii) exposing the potential substance to said protein or receptor; and
- (iii) testing for specific binding.

22. - 23. (Cancelled)

24. (Previously Presented) A composition comprising a gene according to claim 1, a protein according to claim 9, or a receptor according to claim 20.

25.- 28. (Cancelled)

29. (Previously Presented) The receptor of claim 20, wherein the cell which can produce granulocyte colony-stimulating factor is a macrophage.

30-33. (Cancelled)

34. (Previously Presented) An isolated receptor according to claim 20, wherein the substance that can induce production of granulocyte colony-stimulating factor is a monoclonal antibody or an antibody fragment.

35. (Previously Presented) An isolated receptor according to claim 20, wherein the substance that can induce production of granulocyte colony-stimulating factor is a monoclonal antibody that is produced by a hybridoma of the cell line deposited as FERM BP-6103 or an antibody fragment thereof.

36. (Cancelled)

37. (Currently Amended) An isolated gene which encodes a protein having at least 98% identity with the amino acid sequence listed as SEQ ID NO:2 of the Sequence Listing through the conservative substitution of one or more amino acids and also binding to an antibody or an antibody fragment that is **produced by the hybridoma cell line deposited as FERM BP-6103** ~~active to induce granulocyte colony-stimulating factor.~~